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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/607,873

06/28/2003

David Claramunt

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

GHATT, DAVE A

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,873

Applicant(s)

CLARAMUNT ET AL.

Examiner

Dave A. Ghatt

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) 9-23 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-8 in the reply filed on January 10, 2005 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Christiansen et al. (US 6,411,324). As illustrated in Figure 2, Christiansen et al. teaches the claimed method. As outlined in column 1 lines 35-50, Christiansen et al. teaches advancing media in direction, and marking the media as the media advances. With respect to the broad requirement for sensing advancement, column 5 lines 29-52 of Christiansen et al. teach the step of one-dimensional optical sensing of advancement of the media while accommodating for lateral movement of the media. The applicant should note that in the process of sensing for alignment purposes, the apparatus of Christiansen et al. must inherently sense the advancement of the media. In other words, the apparatus cannot provide alignment without sensing an advancement of the media.

With respect to claim 2, column 3 line 66 to column 4 line 24 of Christiansen et al. teach the steps of marking the media as the media advances, which comprises marking the media with

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a mark size matching a field of view of an optical sensor used in the one-dimensional optical sensing of the advancement of the media that allows for the one-dimensional optical sensing of the advancement of the media while accommodating for the lateral movement of the media.

With respect to claims 3 and 4, as shown in Figures 3A and 3B, Christiansen et al. teaches the step of marking an irregular pattern on the media over a plurality of tracks in a second direction perpendicular to the first. For example, Figure 3A shows marking 302 in a first direction, as well as marking patterns at a top track and a bottom track of the page, these marking patterns irregular at least with respect to each other. These markings may also be considered to be irregular with respect to subsequent markings on other sheets of media.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christiansen et al. (US 6,411,324) in view of Miyano (US 6,712,536). As outlined in the above rejection to claim 1, Christiansen et al. teaches all the claimed method steps except that the alignment marks are one-dimensional. With respect to claims 5 and 6, Miyano teaches an arrangement similar to that of Christiansen et al., the method of Miyano also teaching adjusting printing based on the detection of an alignment mark. See Abstract. Column 5 lines 9-11 of Miyano teaches the obviousness in using various types of alignment marks, including "roughened" marks formed by

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etching, scratching, and the like. To one of ordinary skill in the art, it would have been obvious to include roughened marks, as taught by Miyano, in the method of Christiansen et al., in order to enhance optical sensing of the marks.

With respect to claim 5, the applicant should note that by etching the marks of Christiansen et al., as taught by Miyano, Christiansen et al. and Miyano teach the plurality of valleys followed by a space as recited. For example, an etching of the mark at the bottom of the page in Figure 3A would result in the production of a plurality of valleys, followed by a space devoid of a valley.

With respect to claims 7 and 8, Figure 3 of the primary reference Christiansen et al., teaches marking the media across a width with one-dimensional marks, and not “roughened” marks as required. As stated above, column 5 lines 9-11 of Miyano teaches the obviousness in using various types of alignment marks, including “roughened” marks formed by etching, scratching, and the like. To one of ordinary skill in the art, it would have been obvious to include roughened marks, as taught by Miyano, in the method of Christiansen et al., in order to enhance optical sensing of the marks. With respect to the requirement for “a width of the media”, the applicant should note that this does not require an “entire” width of the media.

Response to Arguments

6. The examiner has fully considered the applicant's statements filed on April 7, 2005.

With respect to the applicant's arguments on pages 7-9, arguing that the Christiansen reference does not teach one-dimensional optical sensing of advancement of the media, the examiner respectfully disagrees. As outlined in the rejection statement, in the process of sensing for

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alignment purposes, the apparatus of Christiansen et al. must inherently sense the advancement of the media. In other words, the apparatus cannot provide alignment without first sensing the advancement of the media. Consequently, the original grounds of rejection have been maintained, and this action is made final.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A Ghatt whose telephone number is (571) 272-2165. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAG


REN YAN
PRIMARY EXAMINER